

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Timothy D. Strecker

Confirmation No.:

Application No.:

Examiner:

Filing Date: Herewith

Group Art Unit:

Title: Mixing Rotary Positive Displacement Pump For Micro Dispensing

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e)(1) or (2), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. **EL871861230US**

Date of Deposit 11-18-03

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Alexandria, VA 22313-1450.

By

Typed Name: Donald J. Coulman

Respectfully submitted,

Timothy D. Strecker

By

Donald J. Coulman

Attorney/Agent for Applicant(s)  
Reg. No. **50,406**

Date: 11-18-03

**PATENT APPLICATION**

Sheet 1 of 3

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
	<b>10004251-4</b>		
	APPLICANT		
	<b>Timothy D. Strecker</b>		
	FILING DATE	GROUP	
	<b>Herewith</b>		

**REFERENCE DESIGNATION**

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	5564606	Oct 15, 1996	Engel	
	1B	5593290	Jan 14, 1997	Greisch, et al	
	1C	5819983	Oct 13, 1998	White, et al	
	1D	5857589	Jan 12, 1999	Cline, et al	
	1E	5927560	Jul 27, 1999	Lewis, et al	
	1F	5931355	Aug 03, 1999	Jefferson	
	1G	5992688	Nov 30, 1999	Lewis, et al	
	1H	6126039	Oct 03, 2000	Cline, et al	
	1I	6253972	July 2001	DeVito, et al	
	1J	6234358	May 2001	Romine, et al	
	1K	6202894	Mar 2001	Struminski, et al	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L	WO01/30488A2	10/26/2000	Strehl, Schubel-Hopf		
	1M	WO01/30488A3	10/26/2003	Strehl, Schubel-Hopf		
	1N	EP-0514770A1	Nov 1992	Harada		
	1O	EP-0313519A1	Apr 1989	Germany		
	1P					

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

	1Q	"High Resolution Mixer for the Study of the Kinetics of Rapid Reactions in Solution' from "The Review of Scientific Instruments' Volume 39, Number 4; April 1968; pp 493-498
	1R	'High Speed Optical Stopped-Flow Apparatus' from "The Review of Scientific Instruments" Volume 39, Number 4; April 1968; pp 486-493
	1S	

EXAMINER	DATE CONSIDERED
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EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	2A	3932136	Jan 19, 1976	Stickney	
	2B	3390814	Jul 1968	Creighton, Jr. et al	
	2C	6386396	May 2002	Strecker	
	2D	5265773	Nov 1993	Harada	
	2E	5080264	Jan 1992	Limper	
	2F	5439147	Aug 1995	Bitschnau	
	2G	5655692	Aug 1997	Navin	
	2H	5862957	Jan 1999	Nuttall	
	2I	3901409	Aug 1975	Bradley, et al	
	2J	3184112	May 1965	Loeser	
	2K	3165785	Jan 1965	Hehl	

## FOREIGN PATENT DOCUMENTS

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	2L					
	2M					
	2N					
	2O					
	2P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	2Q	
	2R	
	2S	

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	3A	6070764	Jun 2000	Cline, et al	
	3B	4407431	Oct 1983	Hutter	
	3C	5971227	Oct 1999	White, et al	
	3D				
	3E				
	3F				
	3G				
	3H				
	3I				
	3J				
	3K				

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